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ABSTRACT

This digest describes the emerging study of Knowledge Management (KM), a field that has much to offer administrators in higher education. KM principles recognize that it is important for organizations to "know what they know." It is the organized complexity of collaborative work to share and use information across all aspects of an institution that marks the effective use of knowledge that KM tries to promote. Companies with a focus on KM pay close attention to issues of collaboration, organizational learning, best practices, workflow, intellectual property management, document management, customer-centric focus, and effective use of data. KM will enable colleges to increase student retention and graduation rates, retain a technology workforce, expand Web-based offerings, analyze the cost effective use of technology, and do other things necessary to compete in an environment where institutions cross state and national borders to meet students' needs. Leveraging knowledge capital, using stories in decision making, and becoming an "infomediary" are aspects of implementing KM. Some of the challenges in KM implementation are also outlined. (Contains 19 references.) (SLD)

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Knowledge Management for Higher Education

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Knowledge Management (KM) principles recognize that it is important for organizations to "know what they know." All institutions inherently store, access, and deliver knowledge in some manner. The question is what value is added to the products and services they deliver by the effective use of that knowledge capital.

"Almost any institution in this country will make reference to the *capturing* of know-ledge, the sharing of knowledge and the delivery of knowledge from faculty to students," explains Stevenson. However, KM involves much more, going beyond the inherent knowledge industry of colleges and universities. In the EDUCAUSE Leadership Strategies volume entitled *Information Alchemy: The Art and Science of Knowledge Management*, Bernbom explains that KM involves the "discovery and capture of knowledge, the filtering and arrangement of this knowledge, and the value derived from sharing and using this knowledge throughout the organization" (2001, p. xiv). It is this "organized complexity" of collaborative work to share and use information across all aspects of an institution which marks the effective use of knowledge.

Higher education institutions have "significant opportunities to apply knowledge management practices to support every part of their mission," explains Kidwell et al (2001, p. 24). "Knowledge management should not strike higher education institutions as a radically new idea; rather it is a new spin on their raison d'etre" (p. 24). The problem is that it is such a "wide open area of study that it is difficult to understand the implications of knowledge management for an educational setting" (Thorn, 2001, p. 25). This digest offers a basic introduction to the potential of KM for higher education.

KM Initiatives

Companies with a focus on KM pay close attention to issues of collaboration, organizational learning, best practices, workflow, intellectual property management, document management; customer-centric focus, and using data effectively. KM initiatives include portals that use the web to span communication across an entire enterprise and to promote business-to-business relationships (Roberts-Witt, 1999; Ruber, 2000). The Internet is also used intensively for team collaboration and groupware; natural language queries of data; sharing information on best practices; and anytime/anywhere online learning (Delio, 1999; Sherman, 2000).

According to a survey conducted by *Knowledge Management* magazine and International Data Corporation (IDC) about the state of KM (Dyer and McDonough, 2001), the primary business uses or domains of KM are to:
--Capture and share best practices (77.7%) --Provide training, corporate learning (62.4%) --Manage customer relationships (58.0%)--Deliver competitive intelligence (55.7%) --Provide project workspace (31.4%) --Manage legal, intellectual property (31.4%) --Enhance web publishing (29.9%) --Enhance supply chain management (20.1%) --*Other (5.5%)*

E-learning is one of the most important KM practices, something which one would expect higher education institutions to have as an advantage. Yet these e-learning opportunities are geared most often to students as online customers, not to employees as part of capitalizing on their knowledge as an intellectual asset. The e-learning focus in KM is on "just-in-time knowledge," delivered anytime and anywhere, with the traditional "course" disaggregated into "know-ledge chunks." Two-thirds of 700 companies polled in a Delphi Group study use online resources for training employees (Survey Tracks, 2001).

Data warehouses, data mining, and virtual reality modeling are used as new ways to visualize and transcend extraordinarily complex, transaction-based data (Knowledge Integrity, 2000; Nylund, 2000). The concept of the "executive information system" is taken much further with the use of digital dashboards for monitoring critical processes and performance measures (Angus, 1999a; Karlenzig, 1999; Microsoft, 2000, 2001).

The Microsoft White Paper entitled "Digital Dashboard Business Process Assessment Guide" provides a useful description of this tool:

A digital dashboard is a customized solution for knowledge workers that consolidates personal, team, corporate, and external information and provides single-click access to analytical and collaborative tools. It brings an integrated view of a company's know-ledge sources to an individual's desktop, enabling better decision making by providing immediate access to key business information... (Microsoft, 2000, pp. 1-2).

The goals for the digital dashboard are to focus on critical information, integrate information from a variety of sources, use company knowledge fully, and work with the same information in the office or on the move. In addition, there is a special new focus on "attention management tools" that are designed to address the problem of information overload and help executives focus with personalized web portals to monitor their unique priorities and mission.

Finally, perhaps the most pervasive focus in KM is on being customer-centric, something shared with the TQM and CQI management philosophies but much more pragmatic and data-driven when approached within KM. Much of customer care is moved to the web, where this involves "improved customer satisfaction by meeting their needs at the first point of contact;" more efficient operations that combine call centers and the web; and increased site traffic "eyeballs" and "stickiness" that help build a cohesive online community (Ward, 2001).

The point of KM in customer relations is to retain "institutional memory." With a variety of software tools, the "knowledge base pushes relevant information – such as product announcements, special offers, industry news and regional updates to these customers and partners, based on rules" (Anderson, 2001, p. 64).

Reasons to Adopt KM

Two universities with identical numbers of faculty, degree programs, expenditures, and enrollment may vary widely in how successful they are in rankings such as those conducted by *U.S. News and World Report*. The difference is often intangible value that is added by effective knowledge management. Organizations that reward collaboration and information sharing are "outperforming companies that discourage these practices..." (Microsoft, 2000, p. 1).

The 2001 survey by *Knowledge Management* and IDC found that of those companies that adopt KM, the top reasons are to: --Retain expertise of personnel (51.9%) --Increase customer satisfaction (43.1%) --Improve profits, grow revenues (37.5%)--Support e-business initiatives (24.7%)--Shorten product development cycles (23.0%)--Provide project workspace (11.7%)

As public, private, and for-profit higher education institutions alike respond to the phenomenal growth of online courses, cybercolleges, and virtual universities, these same reasons to adopt KM apply. It is with KM that colleges will be better able to increase student retention and graduation rates; retain a technology workforce in the face of severe employee shortages; expand new web-based offerings; work to analyze the cost effective use of technology to meet more enrollment; transform existing transaction-based systems to provide information, not just data, for management; and compete in an environment where institutions cross state and national borders to meet student needs anytime/anywhere.

KM Leadership

By leveraging knowledge capital, the nature of organizations changes as they become more effective. A new dynamic of information versus data comes into play. In her analysis of grassroots

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small fraction (7%) had CEOs who support KM. Most of the companies implementing KM do it at a grassroots level, with only 8% driven from the top (Delio, 2000). Richard Danzig, Secretary of the Navy explains this phenomenon

One of the attractions of the information revolution is that it moves us away from a top-heavy structure... Information acts like a force of gravity that pulls the decision-making power lower into the organization, so it has more freedom, flexibility and vibrancy. The gravitational pull is toward greater freedom and flexibility for junior personnel, and I think that's very healthy (Delio, 2000, p. 50).

Challenges to Implementing KM

There are obvious challenges to the implementation of KM. The *Knowledge Management* magazine/IDC survey (Dyer and McDonough, 2001) documents the following:
--Employees have no time for KM (41.0%)--Current culture does not encourage sharing (36.6%)--Lack of understanding of KM and benefits (29.5%)--Inability to measure financial benefits of KM (24.5%)--Lack of skill in KM techniques (22.7%)--Organization's processes are not designed for KM (22.2%)--Lack of funding for KM (21.8%)--Lack of incentives, rewards to share (19.9%)--Have not yet begun implementing KM (18.7%)--Lack of appropriate technology (17.4%)--Lack of commitment from senior management (13.9%)--No challenges encountered (4.3%)

Using Stories in Decision-Making

In KM, storytelling serves two purposes. It can "quickly disseminate information and convey meaning at a high level of understanding," explains Scott Smith, global executive for KM at IBM Global Services, in an interview by Gill (2001, p. 27).
The greatest benefit of using storytelling in KM may come from its ability to capture tacit knowledge, which many observers call the most valuable knowledge asset of an organization. Unlike explicit knowledge, which is written down in documents, manuals and other accessible sources, tacit knowledge is implicit in the minds of people, many of whom literally don't know how much their experience has taught them (Gill, 2001, p. 27).

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